

REMARKS

Summary of Claim Status

Claims 2-51 are pending in the present application after entry of the present amendment. Applicant has withdrawn Claims 14-16 and 26-51 from consideration. Claims 2-13 and 17-25 remain active in the present application and are rejected for the reasons discussed below. Applicant requests favorable reconsideration of the claims and withdrawal of the pending rejections and objections, in view of the present amendment and in light of the following discussion.

Restriction Requirement

Applicant hereby affirms the election of the invention of Species 1, Claims 2-13 and 17-25, for prosecution in this application and the withdrawal of Claims 14-16 and 26-51 from consideration. Upon allowance of generic and/or linking claims, Applicant reserves the right to reinstate the withdrawn claims.

Objections

The Examiner has objected to Claims 2-13 and 17-25 for certain informalities. Applicant thanks the Examiner for his close reading of the claims. Applicant has amended Claims 6, 7, 17-21 and 24 in accordance with the Examiner's suggestions to correct the minor inadvertent clerical errors, and such amendments do not relate to prior art. Therefore, Applicant requests withdrawal of the objections.

Applicant has also amended withdrawn Claim 26 to correct its dependency from a canceled claim. This amendment does not relate to prior art and merely corrects an inadvertent error.

Rejections Under 35 U.S.C. § 103

Claims 2-13 and 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masushige et al., JP 4-226039, August 14, 1992 ("Masushige"), in view of Vu et al., U.S. Patent No. 5,256,562 ("Vu"). Applicant respectfully disagrees and traverses this rejection.

The Examiner states that Masushige "does not expressly disclose that the method can further comprise the step of thinning the substrate." (Office Action at ¶4, p. 5). The Examiner attempts to address this shortcoming in Masushige by combining Masushige and Vu and states: "Vu teaches a step of thinning the substrate having a FET thereon." Id. The Examiner continues by alleging: "it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Vu's step of thinning the substrate into the method of Masushige." Id. Applicant, however, respectfully submits that it would not have been obvious to one of ordinary skill in the art to incorporate Vu into Masushige. In fact, Vu and Masushige are wholly incompatible, and it would be impossible to combine the teachings of the two references.

Masushige discloses a method where "a laser beam 6 is applied on the back surface of a transparent substrate 1." (Masushige, English Abstract). As is well known, a laser provides a coherent source of light. As is also known, a laser generally passes through transparent materials and may be absorbed by non-transparent, or opaque, materials, since a laser is a form of light. As shown and disclosed in Masushige, a laser beam 6 passes through the substrate 1, which is explicitly a transparent substrate, in order to modify semiconductor 3. Id. In contrast, Vu discloses a structure where a substrate is etched off, a hole is made, and an opaque conductive shield (76') is added. (See, e.g., Vu, Col. 9, lines 8-22, and Fig. 7F). That is, as taught by Vu, after the substrate is etched and removed, it is replaced by an opaque material for shielding the transistor. Since this shield is opaque, it does not pass any light, and is therefore incompatible with the method of Masushige. The opaque shield of Vu would absorb and block the laser beam of Masushige, thereby preventing the beam from reaching the semiconductor element. It is therefore impossible to combine the teachings of Masushige and Vu, and thus would not have been obvious to one of skill in the art to incorporate Vu into Masushige.

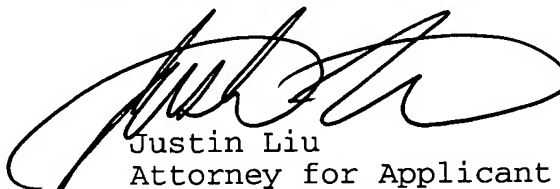
Therefore, Applicant believes Claim 6, which recites a step of thinning the substrate, and a step of directing the energy beam through the substrate, wherein the energy beam is substantially transmitted through the substrate, is allowable over Masushige and Vu. Applicant respectfully requests withdrawal of the rejection and allowance of Claim 6.

Claims 2-5, 7-13 and 17-25 depend, either directly or indirectly, from Claim 6 and thus include all the limitations of Claim 6. Therefore, for at least the reasons set forth above with respect to Claim 6, Applicant believes Claims 2-5, 7-13 and 17-25 are allowable, and respectfully requests allowance of such claims.

Conclusion

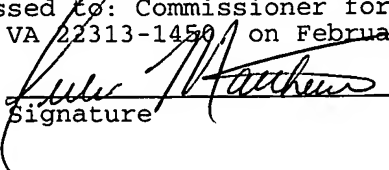
Applicant acknowledges an unusually thorough and helpful analysis of all pending claims by the Examiner. No new matter has been introduced by any of the above amendments. In light of the above amendments and remarks, Applicant believes that Claims 2-13 and 17-25 are in condition for allowance, and allowance of the application is therefore requested. If action other than allowance is contemplated by the Examiner, the Examiner is respectfully requested to telephone Applicant's attorney, Justin Liu, at 408-879-4641.

Respectfully submitted,


Justin Liu
Attorney for Applicant
Reg. No. 51,959

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450 on February 6, 2004.

Julie Matthews
Name


Signature